



Complete Summary

TITLE

Anesthesiology and critical care: percentage of ICU patients aged 18 years and older who receive mechanical ventilation and who had an order on the first ventilator day for head of bed elevation (30-45 degrees).

SOURCE(S)

American Society of Anesthesiologists, Physician Consortium for Performance Improvement®. Anesthesiology and critical care physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 21 p. [5 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of intensive care unit (ICU) patients aged 18 years and older who receive mechanical ventilation and who had an order on the first ventilator day for head of bed elevation (30-45 degrees).

RATIONALE

Mechanically ventilated patients are at high risk for aspiration pneumonia. Elevation of the head of the bed has been shown to reduce the risk of aspiration*.

* The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

Patients should be kept in the semirecumbent position (30–45 degrees) rather than supine to prevent aspiration, especially when receiving enteral feeding. (American Thoracic Society/Infection Diseases Society of America [ATS/IDSA])

In the absence of medical contraindication(s), elevate at an angle of 30-45 degrees the head of the bed of a patient at high risk for aspiration pneumonia (e.g., a person receiving mechanically assisted ventilation or who has an enteral tube in place). (Centers for Disease Control and Prevention [CDC])

PRIMARY CLINICAL COMPONENT

Intensive care unit (ICU); ventilator-associated pneumonia; head of bed elevation

DENOMINATOR DESCRIPTION

All patients aged 18 years and older receiving care in the intensive care unit (ICU) who receive mechanical ventilation (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients who had an order on the first ventilator day for head of bed elevation (30-45 degrees)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Guidelines for preventing health-care--associated pneumonia, 2003: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Safety

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All patients aged 18 years and older receiving care in the intensive care unit (ICU) who receive mechanical ventilation

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patients aged 18 years and older receiving care in the intensive care unit (ICU) who receive mechanical ventilation

Exclusions

Documentation of medical reasons(s) for not ordering head of bed elevation (30-45 degrees) on the first ventilator day

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Therapeutic Intervention

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients who had an order on the first ventilator day for head of bed elevation (30-45 degrees)

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #1: prevention of ventilator-associated pneumonia -- head elevation.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

MEASURE SET NAME

[Anesthesiology and Critical Care Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the American Society of Anesthesiologists and the Physician Consortium for Performance Improvement®

DEVELOPER

American Society of Anesthesiologists
Physician Consortium for Performance Improvement®

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Alex A. Hannenberg, MD (*Co-Chair*); Jinnet Fowles, PhD (*Co-Chair*); Neal Cohen, MD, MPH, MS; Richard T. Connis, PhD; Todd Dorman, MD; Thomas Esposito, MD, MPH, FACS; Ronald A. Gabel, MD; Michael Heisler, MD, MPH; Cynthia P. Helstad, PhD, RN; Daniel L. Herr, MS, MD, FCCM; Kay Jewell, MD, ABHM; Gerald A. Maccioli MD, FCCM; David G. Nickinovich, PhD; Mark D. Morasch, MD; William P. Schechter, MD FACS; Daniel Sessler, MD; Lisa J. Thiemann, CRNA, MNA; Patrick E. Voight, RN, BSN, MSA, CNOR

Karin Bierstein, JD, MPH, American Society of Anesthesiologists

Mark Antman, DDS, MBA, American Medical Association; Joseph Y. Gave, MPH, American Medical Association; Kendra Hanley, MS, CHE, American Medical Association; Karen S. Kmetik, PhD, American Medical Association

Rebecca A. Kresowik, Facilitator; Timothy F. Kresowik, MD, Facilitator

Phil Renner, MBA, National Committee for Quality Assurance

Lisa Buczkowski, RN, MS, Joint Commission on Accreditation of Healthcare Organizations; Elvira Ryan, RN, Joint Commission on Accreditation of Healthcare Organizations

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

INCLUDED IN

Ambulatory Care Quality Alliance
Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2007 Jun

REVISION DATE

2007 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

American Society of Anesthesiologists, Physician Consortium for Performance Improvement®. Anesthesiology and critical care physician performance measurement set. Chicago (IL): American Medical Association; 2007 Oct. 21 p. [5 references]

MEASURE AVAILABILITY

The individual measure, "Measure #1: Prevention of Ventilator-associated Pneumonia -- Head Elevation," is published in the "Anesthesiology and Critical Care Physician Performance Measurement Set." This document and technical

specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on January 2, 2008. The information was verified by the measure developer on January 11, 2008.

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